



MARYLAND Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:03

Reporting for the week ending 01/19/19 (MMWR Week #03)

January 25, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

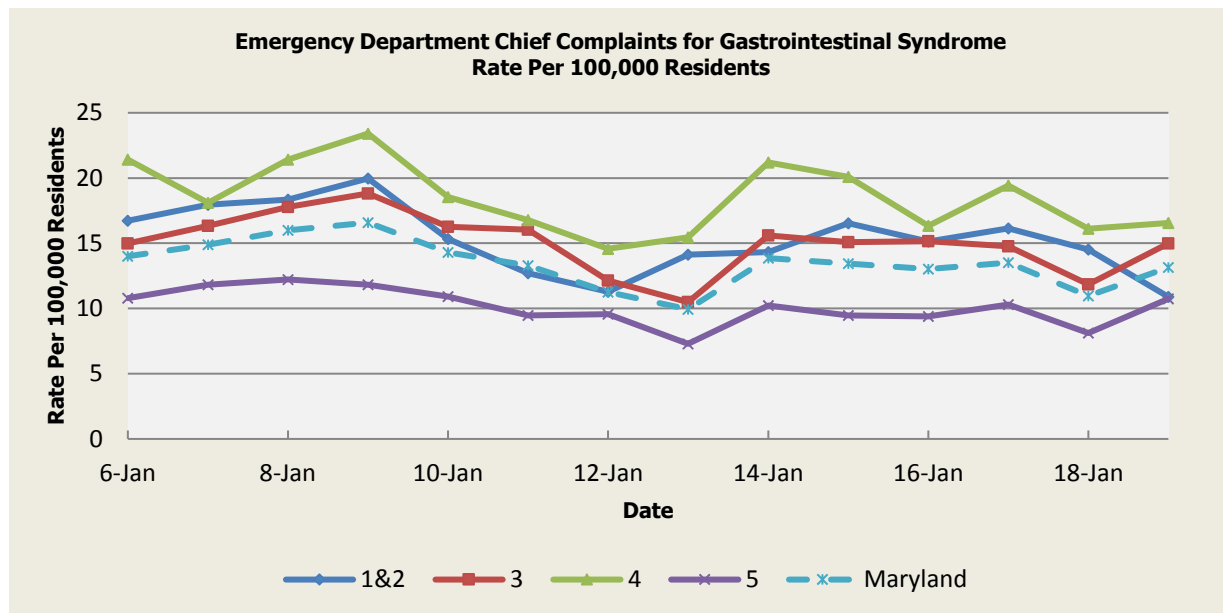
National:	No Active Alerts
Maryland:	Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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Gastrointestinal Syndrome



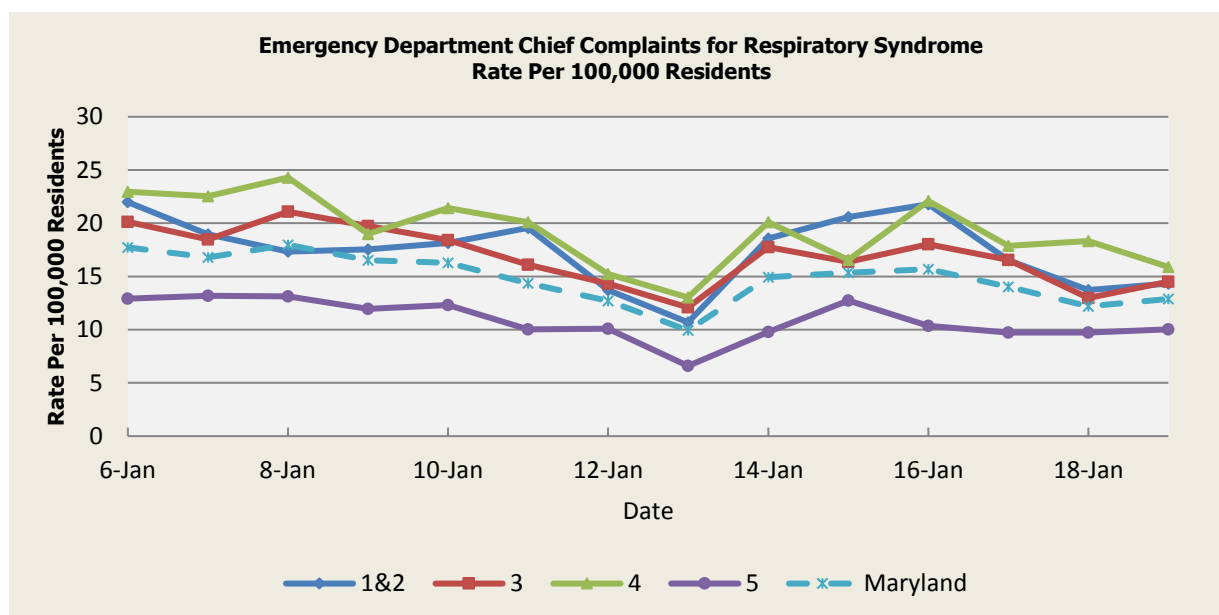
There were three (3) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis in an Assisted Living Facility (Region 3); one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with an Office (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.09	15.04	15.76	10.15	13.06
Median Rate*	12.91	14.80	15.24	10.04	12.95

* Per 100,000 Residents

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Respiratory Syndrome



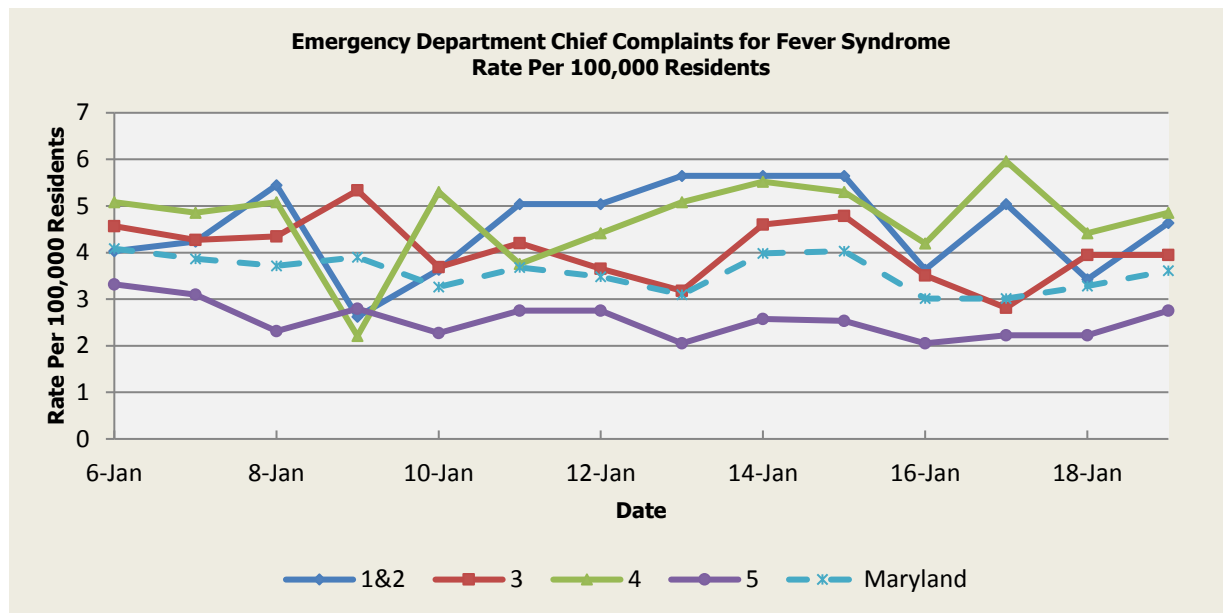
There were three (3) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Influenza in a Nursing Home (Regions 1&2); one (1) outbreak of Influenza associated with a Daycare Center (Region 5); one (1) outbreak of ILI (RSV) associated with a Daycare Center (Region 4).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.50	14.62	14.89	9.91	12.66
Median Rate*	12.10	14.07	14.13	9.52	12.18

* Per 100,000 Residents

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Fever Syndrome



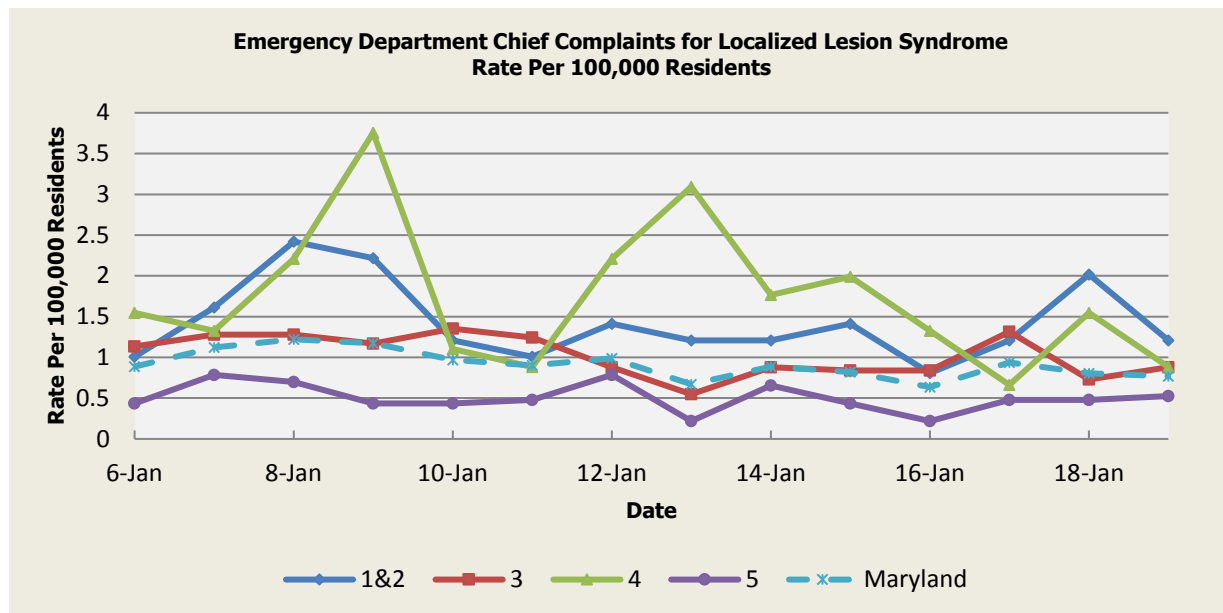
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.03	3.87	4.04	3.02	3.49
Median Rate*	2.82	3.76	3.97	2.92	3.36

**Per 100,000 Residents*

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Localized Lesion Syndrome



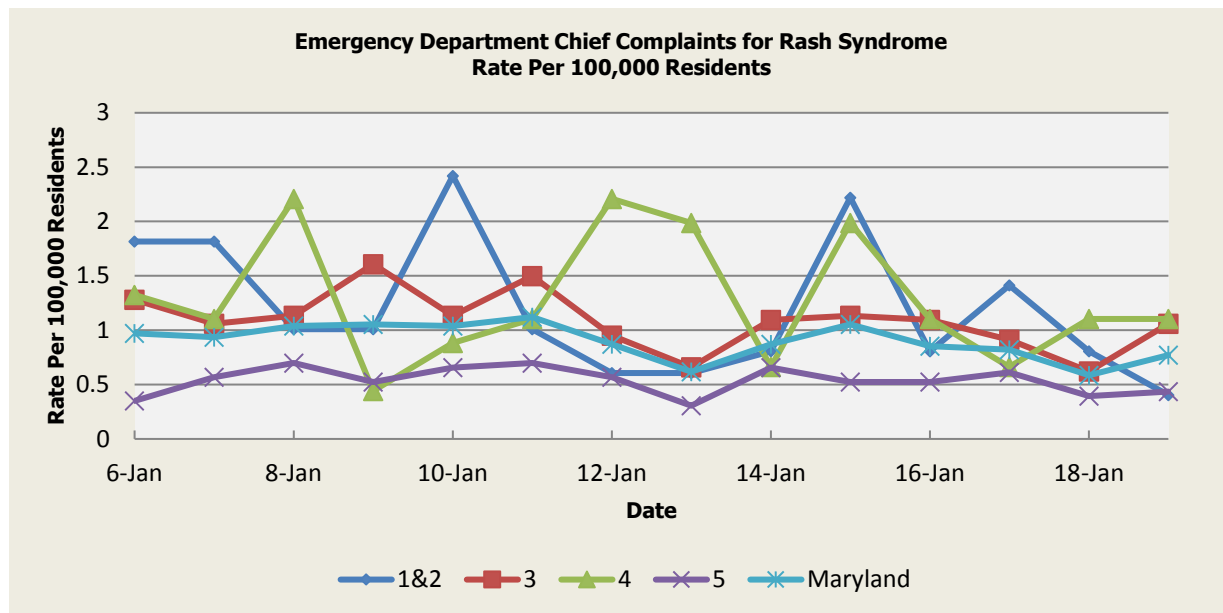
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.09	1.82	2.04	0.92	1.43
Median Rate*	1.01	1.75	1.99	0.87	1.37

* Per 100,000 Residents

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Rash Syndrome



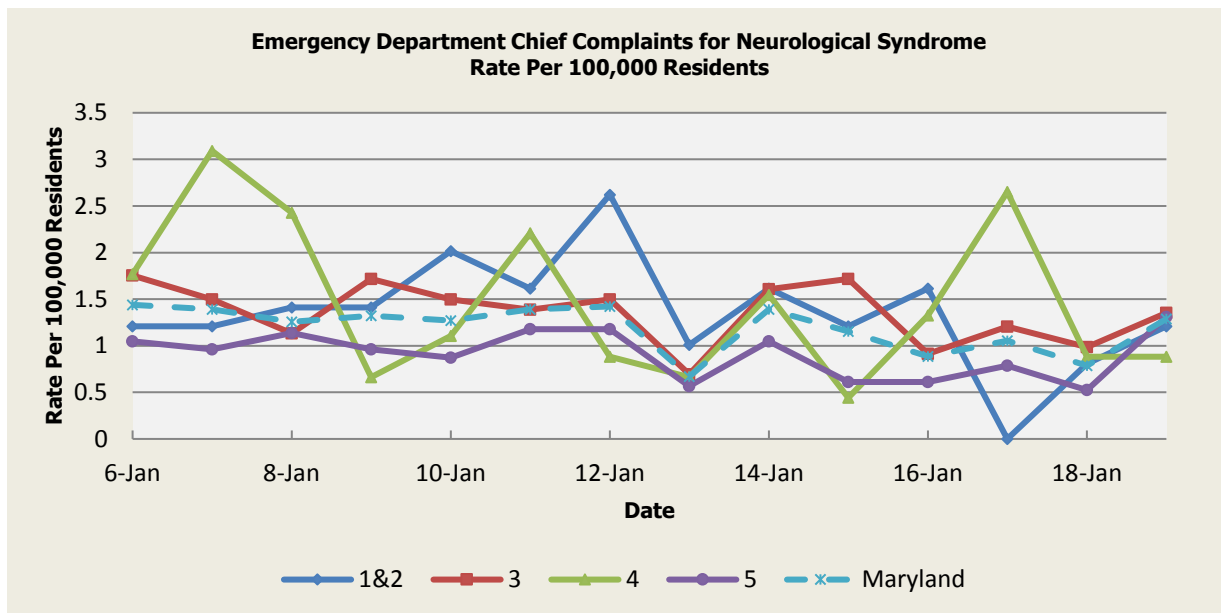
There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.69	1.77	0.99	1.39
Median Rate*	1.21	1.61	1.77	0.96	1.34

* Per 100,000 Residents

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Neurological Syndrome



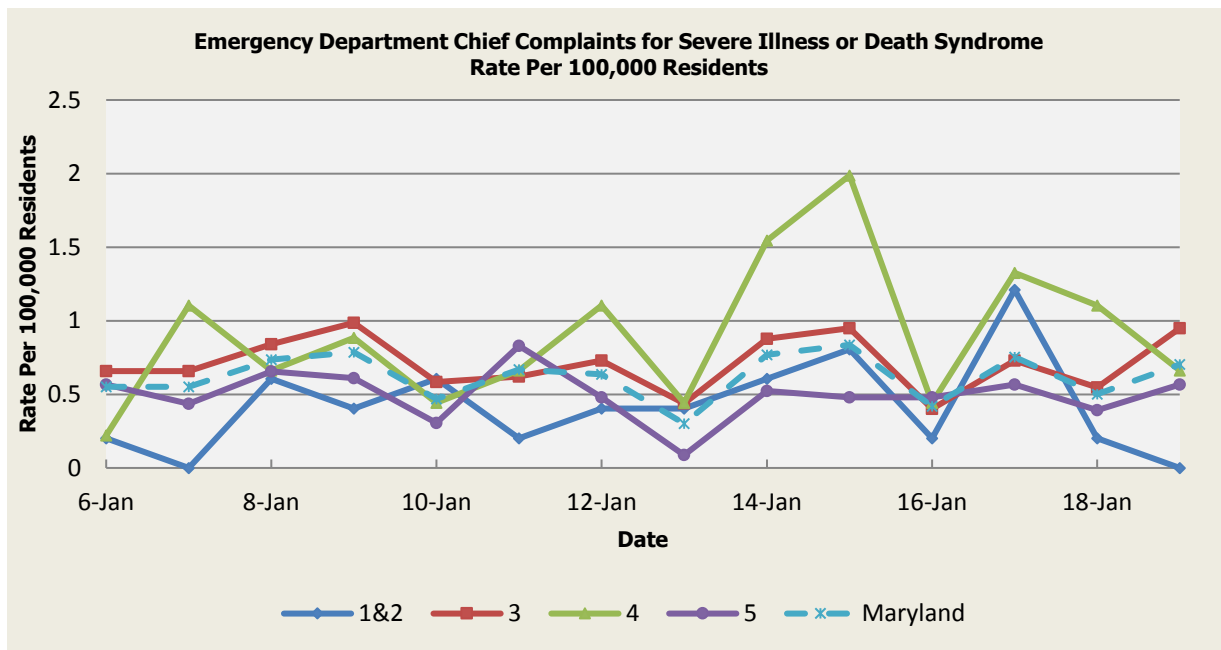
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.75	0.91	0.82	0.57	0.76
Median Rate*	0.60	0.80	0.66	0.52	0.67

* Per 100,000 Residents

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Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

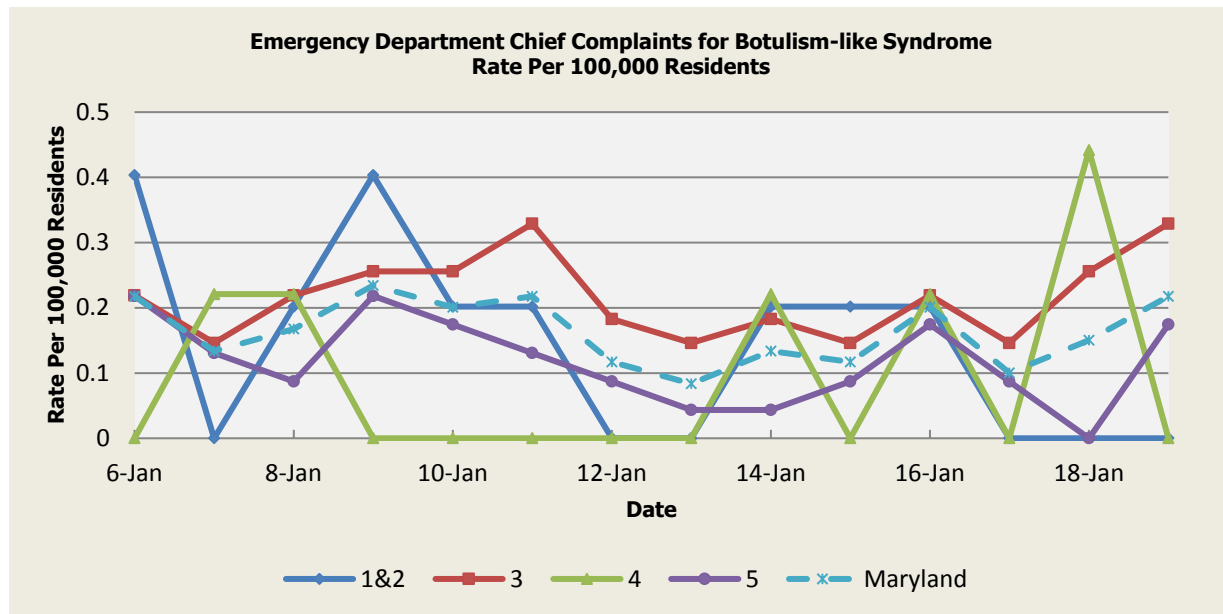
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.91	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

* Per 100,000 Residents

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SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



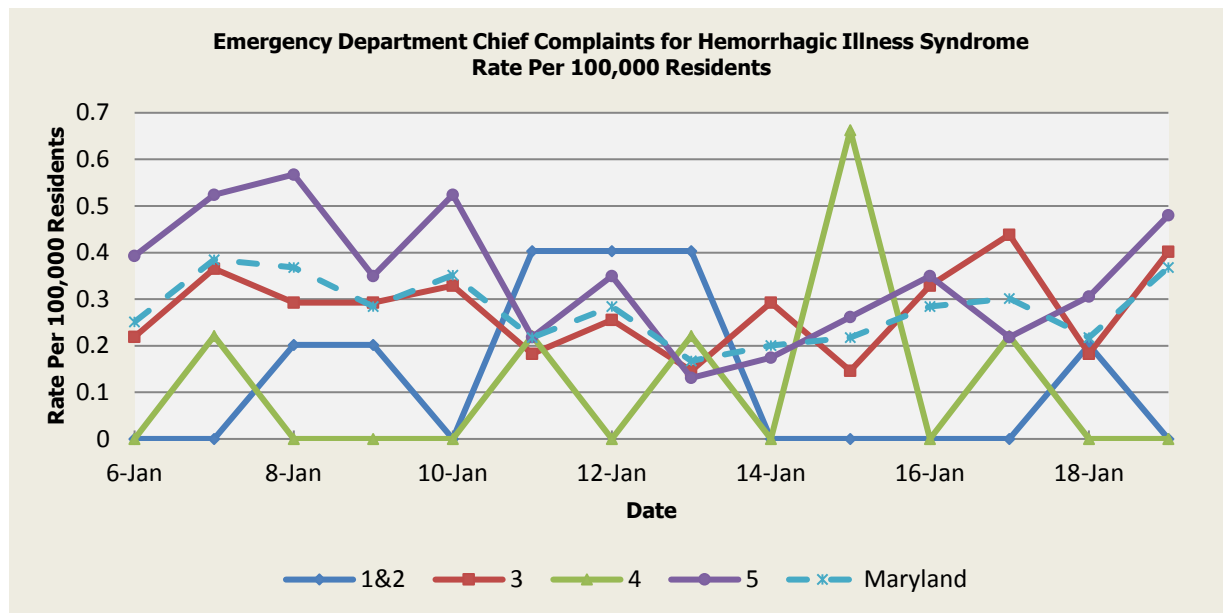
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 1/6 (Regions 1&2,5), 1/7 (Region 4), 1/8 (Regions 1&2,4), 1/9 (Regions 1&2,3,5), 1/10 (Regions 1&2,3,5), 1/11 (Regions 1&2,3), 1/14 (Regions 1&2,4), 1/15 (Regions 1&2), 1/16 (Regions 1&2,4,5), 1/18 (Regions 3,4), 1/19 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

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Hemorrhagic Illness Syndrome



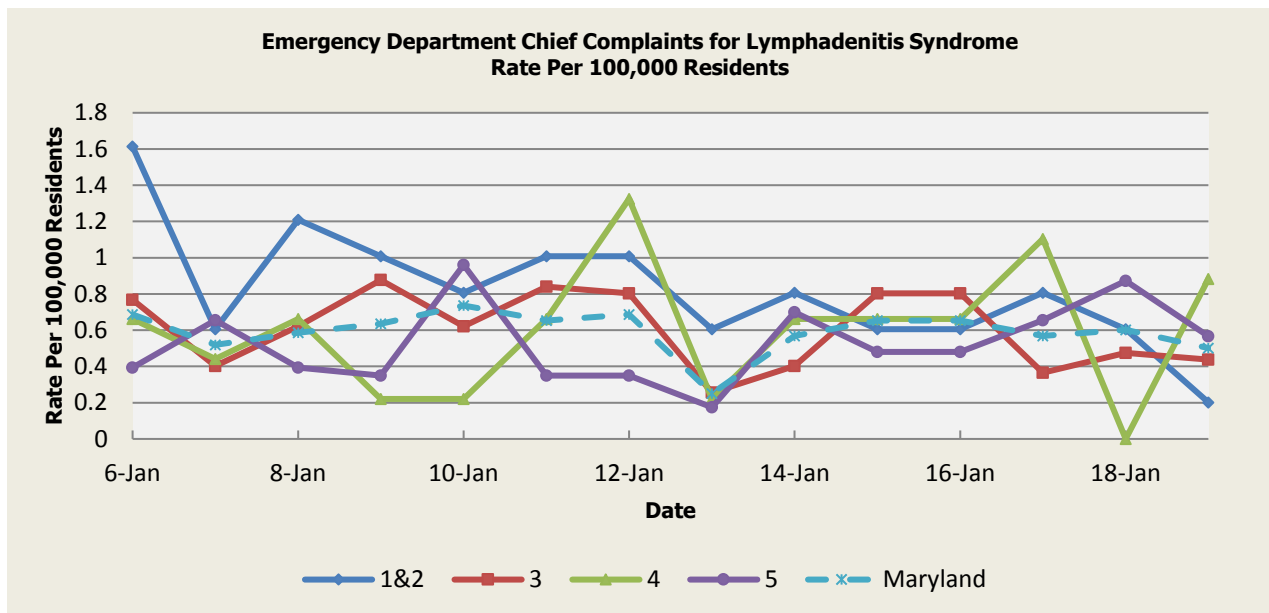
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 1/6 (Region 5), 1/7 (Regions 3,4,5), 1/8 (Regions 1&2,5), 1/9 (Regions 1&2,5), 1/10 (Region 5), 1/11 (Regions 1&2,4), 1/12 (Regions 1&2,5), 1/13 (Regions 1&2,4), 1/15 (Regions 4,5), 1/16 (Regions 3,5), 1/17 (Regions 3,4), 1/18 (Regions 1&2,5), 1/19 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.15	0.03	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

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Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 1/6 (Regions 1&2), 1/8 (Regions 1&2), 1/9 (Regions 1&2), 1/10 (Regions 1&2,4), 1/11 (Regions 1&2), 1/12 (Regions 1&2,4), 1/14 (Regions 1&2), 1/17 (Regions 1&2,4), 1/18 (Region 5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.34	0.57	0.39	0.36	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.40

* Per 100,000 Residents

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

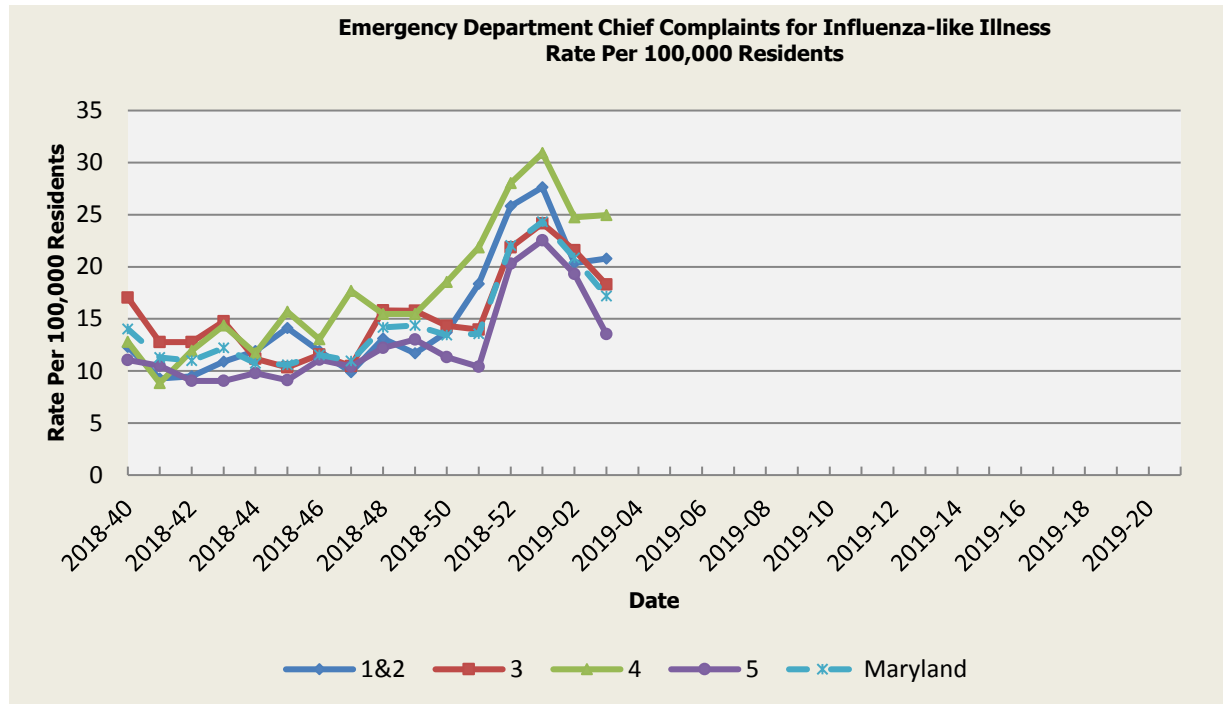
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 03 was: High Intensity.

Influenza-like Illness

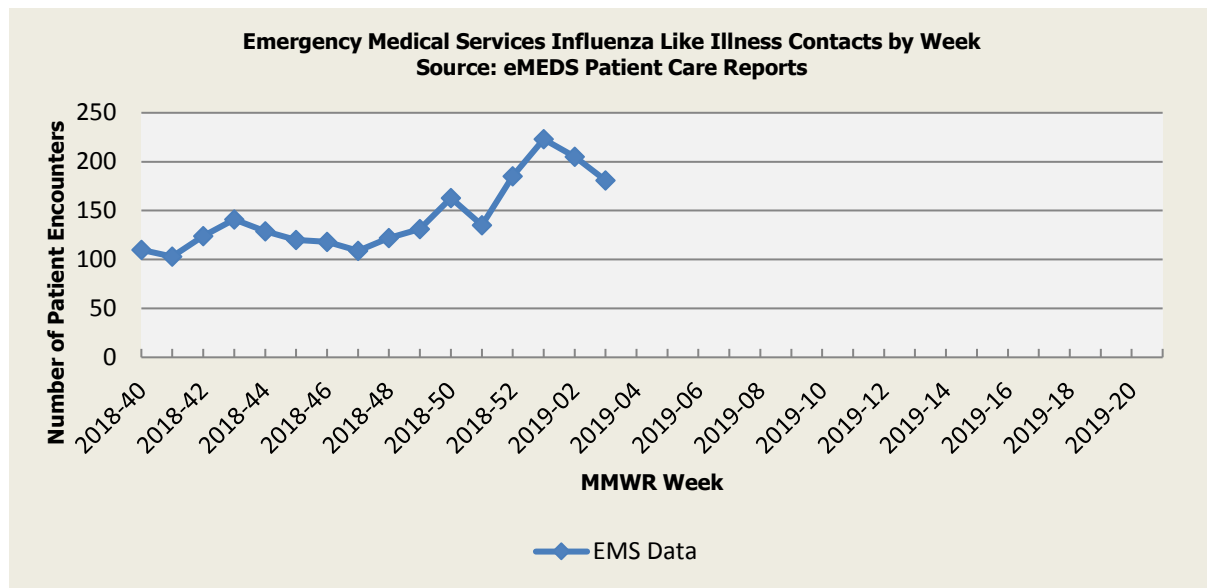


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.74	12.97	12.27	10.98	11.89
Median Rate*	7.56	9.99	9.05	8.56	9.12

* Per 100,000 Residents

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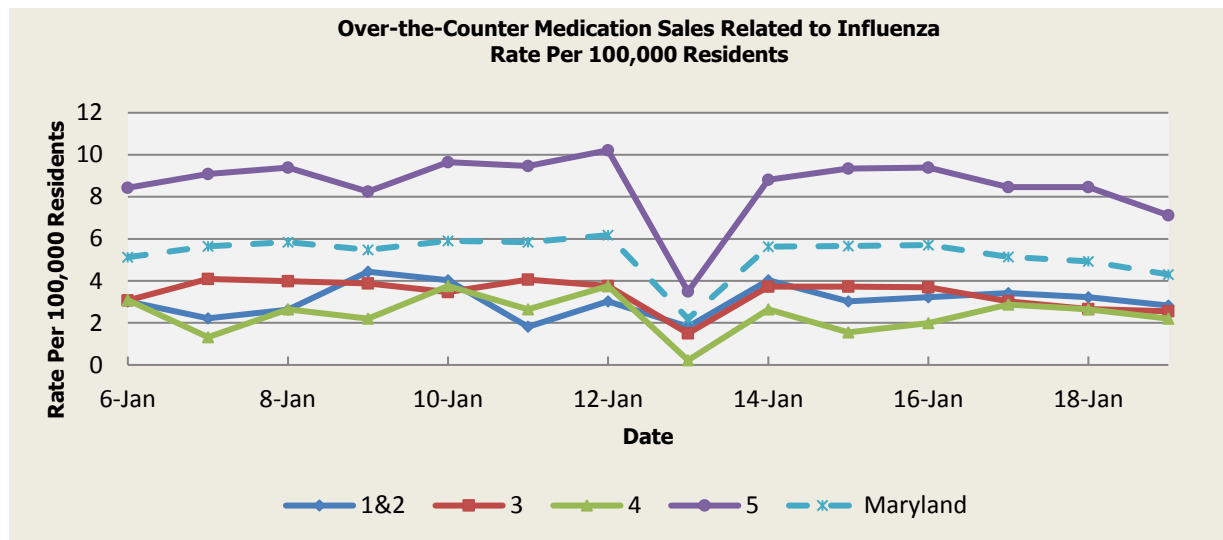
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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Over-the-Counter Influenza-Related Medication Sales



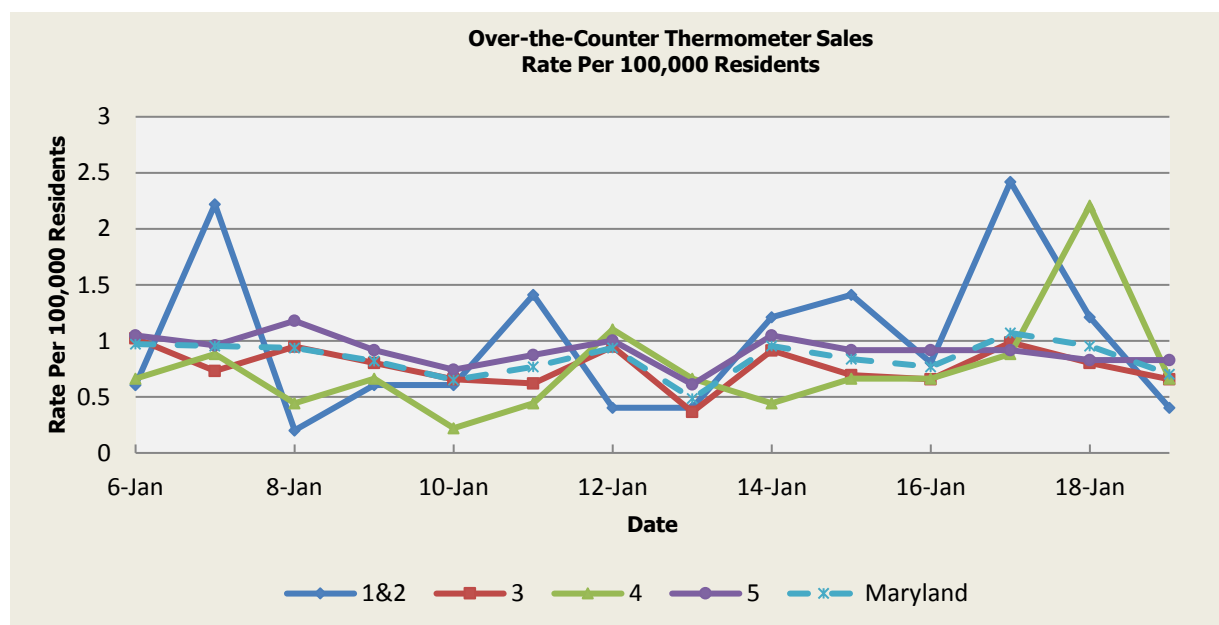
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.62	4.68	2.75	8.10	5.76
Median Rate*	3.02	3.95	2.43	7.47	5.11

* Per 100,000 Residents

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Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.12	2.98	2.35	3.96	3.32
Median Rate*	2.82	2.81	2.21	3.80	3.16

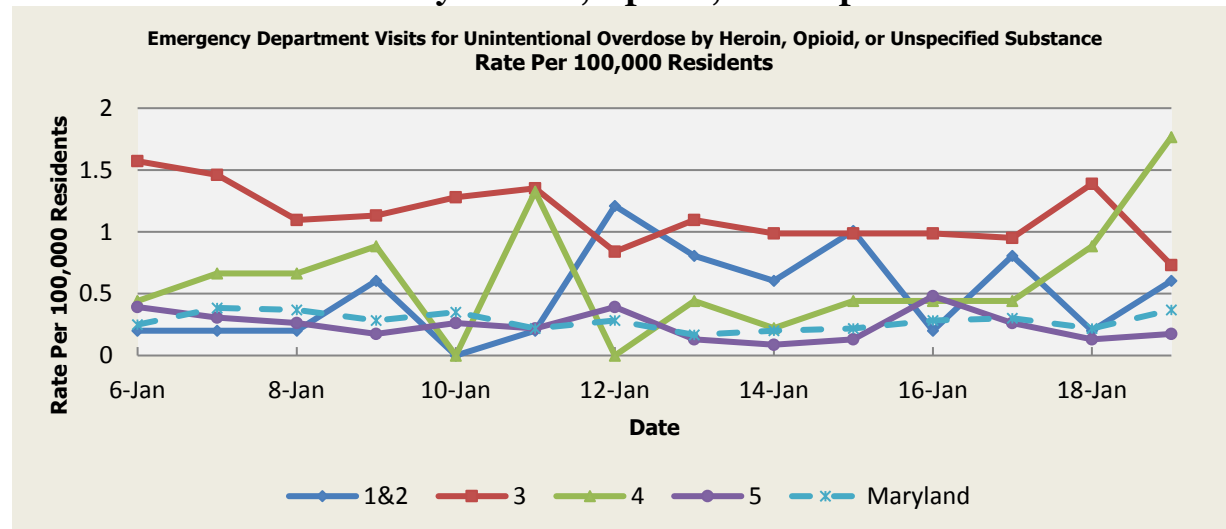
* Per 100,000 Residents

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SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

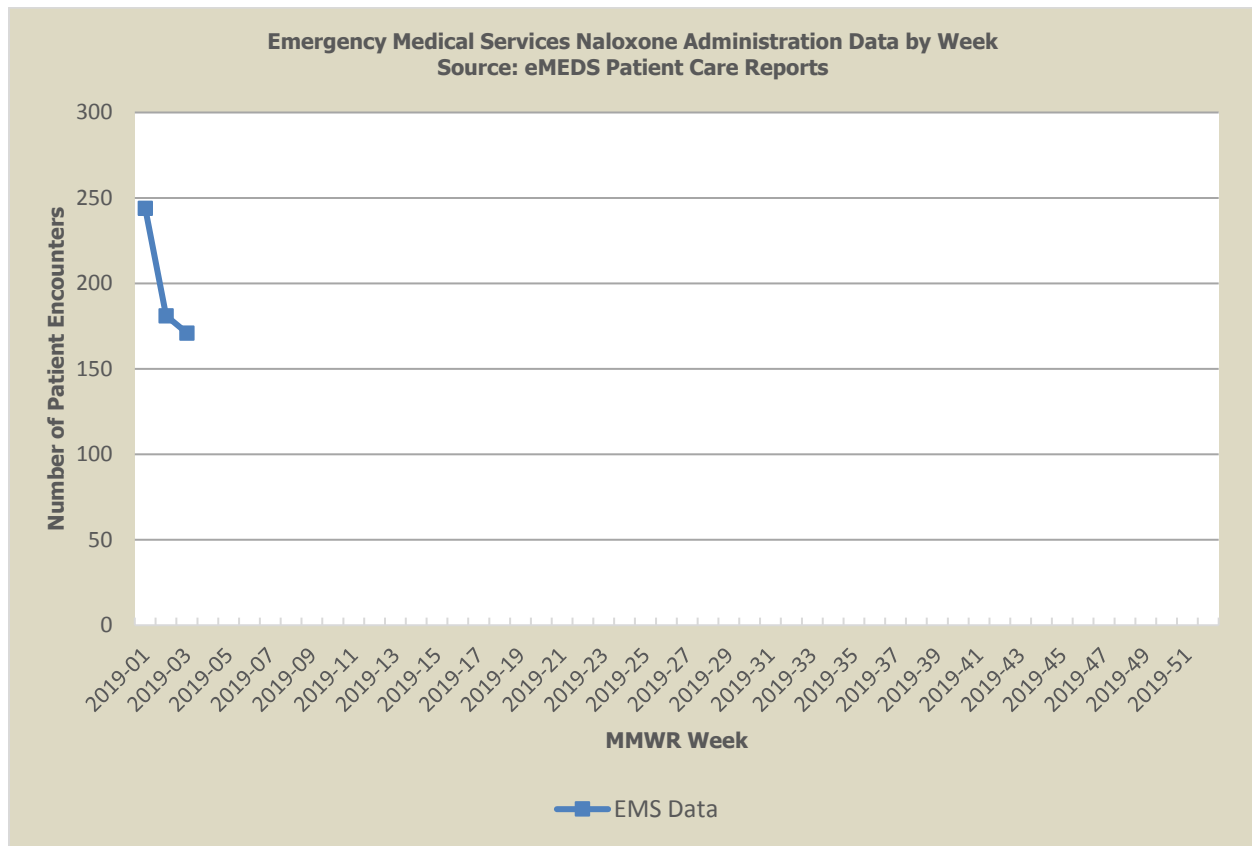
Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcain, and overdose.

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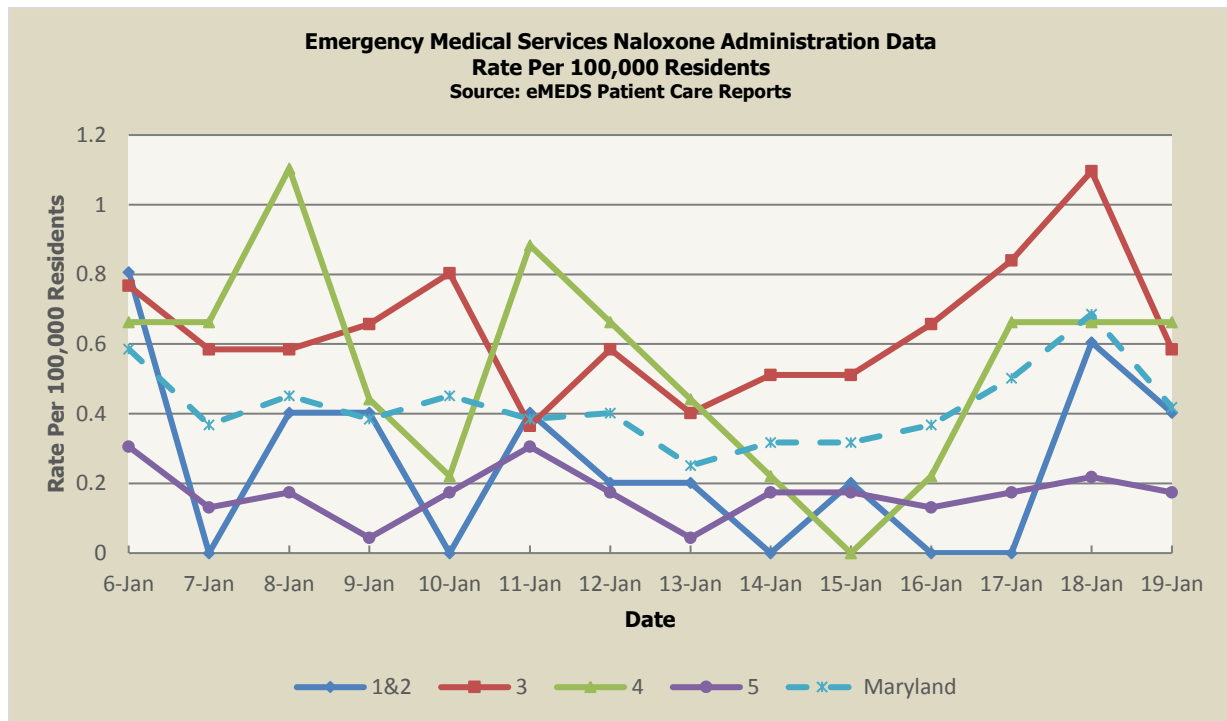
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2019, the WHO-confirmed global total (2003-2018) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

NATIONAL DISEASE REPORTS

ADENOVIRUS (NEW JERSEY), 22 Jan 2019, Researchers reporting on a deadly outbreak of human adenovirus type 7d, or HAdV-7d, said clinicians and public health authorities should consider adenoviruses as a cause of severe respiratory illness in patients, "including during the influenza season." The outbreak occurred in 3 adjacent New Jersey counties from December 2016 to March 2017, with transmission occurring at a college, a substance use rehabilitation facility and in the community, according to CDC epidemiologist Marie Elisabeth Killerby, VetMB, MPH, and colleagues. Four of the 12 patients died. Read More: <http://www.promedmail.org/post/6268192>

RABIES (FLORIDA), 21 Jan 2019, [A.-C.L.] was walking on a bridge by the lake's eastern shore when she saw the otter looking at her and went straight toward her. The otter attacked her

right leg and then bit her left leg and held on while she was running until she got off the bridge. Her dog was not injured in the attack, but [A.-C.L.] was left temporarily unable to walk because of the severe bites on her leg. [A.-C.L.] says that she has encountered many animals before, but that based on the otter's behavior it was obvious that the animal was ill. On 17 Jan 2019, near Lake Maitland, a police officer fatally shot an otter, which eventually tested positive for rabies. [A.-C.L.] believes that the shot otter was the one that attacked her. Health department authorities say 3 people are now being treated for rabies. Read More:

<http://www.promedmail.org/post/6269443>

INTERNATIONAL DISEASE REPORTS

HANTAVIRUS (ARGENTINA), 23 Jan 2019, There has been a new fatal case of hantavirus infection in a 49-year-old woman who died in Chubut, and there are now 13 deaths. The woman was hospitalized in intensive care in the Esquel Zone Hospital. Just in Chubut, there are 11 infected who lost their lives. SB, a 49-year-old woman, resident of Trevelin, died in recent hours as a result of an outbreak in Chubut this past December [2018]. With this situation, there are now 13 fatal victims in the entire country as a result of this virus disease. Read More:

<http://www.promedmail.org/post/6274142>

EBOLA (DEMOCRATIC REPUBLIC OF CONGO), 22 Jan 2019, The epidemiological situation of the Ebola Virus Disease dated 22 Jan 2019: Since the beginning of the epidemic, the cumulative number of cases is 713, of which 664 are confirmed and 49 are probable. In total, there were 439 deaths (390 confirmed and 49 probable) and 247 people cured; 203 suspected cases under investigation; 14 new confirmed cases, including 9 in Katwa, 2 in Mangurujipa, 1 in Biena, 1 in Butembo and 1 in Kayina; 6 new confirmed cases, including: 4 community deaths (2 in Katwa and 2 in Mangurujipa); 2 deaths in CTEs (1 in Butembo and 1 in Beni); 1 new person healed out of Butembo CTE. Read More: <http://www.promedmail.org/post/6273621>

INFLUENZA (MULTIPLE LOCATIONS), 22 Jan 2019, A confirmed influenza-associated death has been reported in the Two Rivers Public Health Department District, which includes Dawson, Buffalo, Gosper, Phelps, Kearney, Harlan and Franklin counties. According to a press release from Two Rivers, there is widespread flu activity across the state at this time. Outbreaks are occurring in schools, long-term care facilities, hospitals, clinics and workplaces. The health department did not release a name or city where the death occurred. Read More:

<http://www.promedmail.org/post/6268175>

HEPATITIS A (COSTA RICA), 22 Jan 2019, Health officials in Costa Rica continue to investigate the hepatitis A outbreak reported in the province of Puntarenas where 33 cases have been reported during the 1st 11 days of 2019, according to the [health ministry] (computer translated). Cases have been primarily reported in the following districts: Barranca (10), Oak (8), and Chacarita (7). Read More: <http://www.promedmail.org/post/6270374>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):
<http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

